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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/579,064

05/11/2006

Jan Tuma

51180

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1609 7590 07/07/2010

ROYLANCE, ABRAMS, BERDO & GOODMAN, L.L.P.

1300 19TH STREET, N.W.

SUITE 600

WASHINGTON,, DC 20036

EXAMINER

FEATHERLY, HANA SANEI

ART UNIT

PAPER NUMBER

2889

MAIL DATE

DELIVERY MODE

07/07/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/579,064	Applicant(s) TUMA, JAN	
	Examiner HANA S. FEATHERLY	Art Unit 2889	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 April 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 May 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>5/11/06; 4/27/07</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment(s)

The Preliminary Amendment, filed on 5/11/06, has been entered and acknowledged by the Examiner.

Claim(s) 1-16 are pending in the instant application.

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Specification

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: -- Display device with adhesion closure elements --.

Claim Rejection(s) - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim(s) 1, 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim(s) 1, the phrase "or the like" renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by

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"or the like"), thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(d).

Claim 13 recites the limitation "the second flat substrate" in line 2. There is insufficient antecedent basis for this limitation in the claim.

For purposes of examination, Examiner will interpret "the second flat substrate" as -- a second flat substrate --.

Claim Rejection(s) - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claim(s) 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tuma (DE 103 01 424 B3) in view of Harasawa et al., (U.S. Pub. No. 2002/0144442 A1).

Regarding Claim 1, Tuma teaches device (5, "circuit" → 7, "an electronic component in form of an integrated semiconductor device 7," ¶ [0025]; see at least Fig. 1) having a first fiat substrate (3, "laminar carrier 3 from a thermoplastic mouldable plastic"), characterized in that the first fiat substrate (3) on the first surface (4) has adhesion closure elements (2 "detention catch elements," [0027]) which protrude at least in areas from the first surface (4) for detachably securing the device (5) to a carrier means (9-11, "clothing part," [0027]) by interaction of adhesion closure elements (10) of

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the first fiat substrate (3) with the carrier means (9-11). Tuma fails to teach the device specifically being a display device.

In the same field of endeavor of **electronic components types**, Harasawa teaches device that is a display device with a plurality of pixels for display of static and motion pictures, alphanumeric characters or the like, the pixels being triggerable by means of trigger electronics individually or in groups ([0034]) in order to advantageously expand the purpose/use and functionality of the device of Tuma by adding 'display' images. It should additionally be noted that Tuma teaches a variation of the type of respective application use ([0007]-[0010]), therefore it would have been further obvious to one of ordinary skill in the art, at the time of the invention to employ 'display device' as the 'electronic components' of Tuma.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify or add the display device, as disclosed by Harasawa, in the device of Tuma in order to advantageously expand the purpose/use and functionality of the device of Tuma by adding 'display' images.

Regarding Claim 2, Tuma the adhesion closure elements (2) of the first fiat substrate (3) interact mechanically with the corresponding adhesion closure elements (10) of the carrier means (9-11), especially wherein the adhesion closure elements (2) of the first fiat substrate (3) and the carrier means (9-11) can interlock with one another (as clearly displayed in Fig. 1).

Regarding Claim 3, Tuma-Harasawa teaches the invention set forth above (see rejection in Claim 1 above) and further teaches adhesion closure elements (2) of the

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first fiat substrate (3) interact with a surface of the carrier means (9-11). Tuma-Harasawa fails the teach adhesion closure elements of the first fiat substrate interact with a surface of the carrier means by chemical bonding forces, especially by van der Waals forces.

However, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to provide that the adhesion closure elements of the first fiat substrate interact with a surface of the carrier means by chemical bonding forces, especially by van der Waals forces since such electrostatic interactions yield a highly adhesive and bonded interface, thereby improving mechanical stability.

Regarding Claim 4, Tuma teaches that the adhesion closure elements (2) are made in one piece from the first fiat substrate (3, Fig. 1).

Regarding Claim 5, Tuma teaches the adhesion closure elements (3). The applicant is claiming the product of adhesion closure elements including a method (i.e. a process) of making without molding tools, consequently, Claim 5 is considered a “product-by-process” claim. In spite of the fact that the product-by-process claim may recite only process limitations, it is the product and not the recited process that is covered by the claim. Further, patentability of a claim to a product does not rest merely on the difference in the method by which the product is made. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior art product was made by a different process.

Furthermore, it is well established that a claimed apparatus cannot be distinguished over the prior art by a process limitation. Consequently, absent a showing of an unobvious difference between the claimed product and the prior art, the subject product-by-process claim limitation is not afforded patentable weight (see MPEP 2113).

Regarding Claim 6, Tuma teaches that the first fiat substrate (3) consists of a plastic, especially of a thermoplastic (3 → “thermoplastic,” [0025]).

Regarding Claim 7, Tuma-Harasawa teaches the invention set forth above (see rejection in Claim 1 above). Tuma-Harasawa fails to teach the first fiat substrate consisting of a duroplastic

However, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify the composition of the first flat substrate to duroplastic, since such a modification would advantageously render the substrate flexible and thereby better able to absorb residual mechanical vibrations.

Regarding Claim 8, Tuma-Harasawa teaches the invention set forth above (see rejection in Claim 1 above). Tuma-Harasawa fails to teach the first fiat substrate is elastic.

However, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify the composition of the first flat substrate to an elastic first flab substrate, since such a modification would advantageously render the substrate flexible and thereby better able to absorb residual mechanical vibrations.

Regarding Claim 9, Tuma-Harasawa teaches that the triggerable pixels (2; 102) and/or at least part of the trigger electronics ([0034] of Harasawa) are located on the first fiat substrate (3 of Tuma, as part of electronic components 5).

Motivation to combine would be the same as stated in the rejection of Claim 1.

Regarding Claim 10, Tuma-Harasawa teaches that the triggerable pixels ([0034] of Harasawa) and/or at least part of the trigger electronics are located on the second surface of the first flat substrate (3 of Tuma, as part of electronic components 5), especially opposite the first surface (4). It should be noted that the current claim language does not require that the first and second surfaces 'face' each other and may actually be in the same plane.

Motivation to combine would be the same as stated in the rejection of Claim 1.

Regarding Claim 11, Tuma-Harasawa teaches the pixels ([0034] of Harasawa) are formed by liquid crystals, electronic ink or electroluminescent components, especially polymer light emitting diodes.

Motivation to combine would be the same as stated in the rejection of Claim 1.

Regarding Claim 12, Tuma teaches pixels ([0034] of Harasawa - motivation to combine would be the same as stated in the rejection of Claim 1). The applicant is claiming the product of pixels including a method (i.e. a process) of making via thin-film or thick-film technology, consequently, Claim 12 is considered a "product-by-process" claim. In spite of the fact that the product-by-process claim may recite only process limitations, it is the product and not the recited process that is covered by the claim. Further, patentability of a claim to a product does not rest merely on the difference in

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the method by which the product is made. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior art product was made by a different process.

Furthermore, it is well established that a claimed apparatus cannot be distinguished over the prior art by a process limitation. Consequently, absent a showing of an unobvious difference between the claimed product and the prior art, the subject product-by-process claim limitation is not afforded patentable weight (see MPEP 2113).

Regarding Claim 13, Tuma-Harasawa teaches the pixels ([0034] of Harasawa) are produced on a second flat substrate which is connected (in directly connected) to the first flat substrate, in particular wherein the second flat substrate is laminated to the first flat substrate.

Motivation to combine would be the same as stated in the rejection of Claim 1.

Regarding Claim 14, Tuma-Harasawa teaches that the display device ([0034] of Harasawa) furthermore has a flat illuminant which emits light as a result of supplying energy, especially electrical energy. Since the electronic component of Tuma is flat, then the addition of the display device of Harasawa will also be rendered flat.

Motivation to combine would be the same as stated in the rejection of Claim 1.

Regarding Claim 15, Tuma-Harasawa teaches a flat illuminant applied to the first flat substrate (motivation to combine would be the same as stated in the rejection of Claim 14). The applicant is claiming the product of flat illuminant including a method (i.e. a process) of making via thin or thick film technology especially impressed, consequently, Claim 15 is considered a "product-by-process" claim. In spite of the fact

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that the product-by-process claim may recite only process limitations, it is the product and not the recited process that is covered by the claim. Further, patentability of a claim to a product does not rest merely on the difference in the method by which the product is made. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior art product was made by a different process.

Furthermore, it is well established that a claimed apparatus cannot be distinguished over the prior art by a process limitation. Consequently, absent a showing of an unobvious difference between the claimed product and the prior art, the subject product-by-process claim limitation is not afforded patentable weight (see MPEP 2113).

Regarding Claim 16, Tuma-Harasawa teaches that the fiat illuminant ([0034] of Harasawa) is located between the first fiat substrate (3 of Tuma) and the pixels (as modified by addition of display device of Harasawa).

Motivation to combine would be the same as stated in the rejection of Claim 1.

Other Prior Art Cited

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

U.S. Pat. No. 5136470 to Sheridan et al.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hana S. Featherly whose telephone number is (571)-272-8654. The examiner can normally be reached on Monday- Friday, 9 am - 5 pm. If

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attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Minh-Toan Ton can be reached on (571) 272-2303. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Hana Featherly/

Hana Sanei Featherly
Art Unit 2889 Patent Examiner

/Toan Ton/

Supervisory Patent Examiner, Art Unit 2889